

CLAIMS

What is claimed is:

1. A method for enhancing access to information on a computer network, said computer
5 network carrying and routing data between computers connected thereto, said computers
including at least one client computer associated with one or more users, at least one server
associated with a provider of goods, services or information, and at least one browsing agent
server associated with an autonomous browsing agent, said method comprising the steps of
 - (a) monitoring clickstream data for elements characteristic of data upon which said
10 browsing agent can operate;
 - (b) displaying a browsing agent launch window on a display, said browsing agent
window allowing said user to launch said browsing agent.
2. The method of claim 1 further comprising the steps of
 - (c) if said user launches said browsing agent, transmitting click stream data to said
15 browsing agent server;
 - (d) receiving control data corresponding to said click stream data; and
 - (e) displaying a command option to said user, if one exists.
3. The method of claim 1 further comprising the step of
 - (f) repeating steps (a)-(e) a desired number of times.
4. The method of claim 1, 2 or 3 wherein said browsing agent window comprises between
1 and 10 percent of the total viewing area of said display.
5. The method of claim 1, 2 or 3 wherein said browsing agent window comprises between
1 and 10 percent of the total window displaying the user's browsing session.

6. The method of claims 1, 2, 3, 4 or 5 wherein said browsing agent window is displayed for a predetermined amount of time.

7. The method of claim 6 wherein said browsing agent window vanishes, if said user does not elect to launch said browsing agent within said predetermined amount of time.

8. The method of claim 1 wherein said browsing agent window lies along an edge of the display.

9. The method of claim 1 wherein said browsing agent window lies along an edge of the window displaying the user's browsing session.

10. The method of claim 8 or 9 wherein said edge is the lower horizontal edge.

11. The method of claim 8 wherein said browsing agent window extends upwardly from said lower horizontal edge of said display.

12. The method of claim 11 wherein the vertical dimension of said browsing agent window spans between 5 and 10 percent of said display.

13. The method of claim 8 wherein said browsing agent window extends upwardly from said lower horizontal edge of said window.

14. The method of claim 11 wherein the vertical dimension of said browsing agent window spans between 5 and 10 percent of said window.

15. The method of claim 1 wherein said scanning step (a) occurs at said client computer.

16. An apparatus operably connected to a computer network, the computer network carrying and routing data between computers connected thereto, the computers including a browsing agent server configured to facilitate operation of network access devices, comprising

5 a display device,
 a network access module, the network access module facilitating access to and display of data transmitted over the computer network; and
 a browsing agent client, the browsing agent client, in a limited mode, monitoring the clickstream associated with the network access module for indications that the browsing agent client may be operable; wherein the browsing agent client presents a browsing agent launch control on the display device when the browsing agent client may be operable, the browsing agent launch control facilitating launch of additional functionality of the browsing agent client.

15 17. The apparatus of claim 16 wherein the network access module is a browser.

 18. The apparatus of claim 16 wherein, if the browsing agent launch control is activated, the browsing agent client operates in an on-line mode to transmit clickstream data to the browsing agent server and receive control data corresponding to the clickstream data.

20 19. The apparatus of claim 18 wherein the browsing agent client presents a command option, if one exists, associated with the control data.

25 20. The apparatus of claim 16 wherein the browsing agent launch control comprises a window spanning between 1 and 10 percent of the total viewing area of the display device.

21. The apparatus of claim 16 wherein the browsing agent launch control comprises a window spanning between 1 and 10 percent of the total window displaying the user's browsing session.

22. The apparatus of claim 16 wherein the browsing agent launch control is displayed for a predetermined amount of time.

23. The apparatus of claim 22 wherein the browsing agent launch control vanishes, if the user does not elect to launch the browsing agent within the predetermined amount of time.

24. The apparatus of claim 16 wherein the browsing agent launch control lies along an edge of the display.

25. The apparatus of claim 16 wherein the browsing agent launch control lies along an edge of the window displaying the user's browsing session.

26. A system allowing for enhanced access to information and services over a computer network, the computer network carrying and routing data between computers connected thereto, comprising

at least one network access device operably connected to the computer network;
and

a browsing agent server operably connected to the computer network;
the browsing agent server configured to facilitate operation of network access devices in conjunction with a browsing agent client,

the network access device comprising a display device and a network access module, the network access module facilitating access to and display of data transmitted over the computer network; and, a browsing agent client, the browsing agent client monitoring, in a limited mode, the clickstream associated with the network access module

for indications that the browsing agent client may be operable, wherein the browsing agent client presents a browsing agent launch control on the display device when the browsing agent client may be operable, the browsing agent launch control facilitating launch of additional functionality of the browsing agent client;

5 the browsing agent client, when launched, transmitting clickstream data to the browsing agent server and receiving control data in return.

27. The system of claim 26 wherein the network access module is a browser.

10 28. The system of claim 26 wherein the browsing agent client presents a command option, if one exists, associated with the control data.

29. A system allowing for enhanced access to information and services over a computer network, the computer network carrying and routing data between computers connected thereto, comprising

15 at least one network access device operably connected to the computer network; and

 a browsing agent server operably connected to the computer network;
 the browsing agent server configured to facilitate operation of network access
20 devices in conjunction with a browsing agent client,

 the network access device comprising a network access module, the network access module facilitating access to and display of data transmitted over the computer network; and, a browsing agent client, the browsing agent client monitoring the clickstream associated with the network access module, the browsing agent client further transmitting
25 clickstream data to the browsing agent server and receiving control data in return.

30. The system of 29 wherein the browsing agent client is operable to perform operations associated with the control data.

31. The system of claim 30 wherein the browsing agent client automates operation of page-based interfaces displayed by the network access module.

32. The system of claim 29 or 30 wherein the browsing agent client includes a user account database storing user data.

33. The system of claim 32 wherein the user data is stored in encrypted form.

34. The system of claim 33 wherein the browsing agent server is operable to authenticate users at the network access device; wherein the browsing agent server, after authentication of a user at the network access device, transmits a cryptographic key to the browsing agent client; the cryptographic key being operable to facilitate access to the encrypted user data stored in the user account database.

35. The system of claim 34 wherein the browsing agent client decrypts the encrypted user data with the cryptographic key and inserts the decrypted user data into the data fields of a form downloaded by the network access module according to the control data transmitted by the browsing agent server.

36. An apparatus allowing for enhanced access to information and services over a computer network, the computer network carrying and routing data between computers connected thereto, the computers including a browsing agent server, comprising

a network access module facilitating access to and display of data transmitted over the computer network; and

a browsing agent client, the browsing agent client monitoring the clickstream associated with the network access module, the browsing agent client further transmitting clickstream data to a browsing agent server and receiving control data in return.

37. The apparatus of claim 36 wherein the network access module is a browser.

38. The apparatus of claim 36 wherein the browsing agent client presents a command option, if one exists, associated with the control data.

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Patent Application for "AUTONOMOUS BROWSING AGENT"